

Reexam Control No.: 90/005,369

PATENTIN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	DeGarie et al.	Examiner:	C. Upton
Patent No.	4,672,691		
Serial No.:	06/805,801	Group Art Unit:	1724
Filed:	December 6, 1995	Docket No.:	11994 USRX
Title:	BULK VOLUME FERMENTER		

DECLARATION OF CLAUDE G. DEGARIE

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

I, Claude G. DeGarie, declare and state as follows:

1. I am a co-inventor of U.S. Patent No. 4,672,691 ("the '691 patent"). The '691 patent is the subject of the above-referenced reexamination, Reexam Control No. 90/005,369.
2. I am employed by ADI Group Inc. ("ADI"), 1133 Regent Street, Fredericton, New Brunswick, Canada, the assignee of the '691 patent. I am the Vice President of Geomembrane Technologies Inc., 1133 Regent Street, Fredericton, New Brunswick, Canada. Geomembrane Technologies Inc. is a subsidiary of ADI.
3. I have been employed by ADI or one of its subsidiaries since 1979 through the present.
4. I graduated from the University of Moncton in 1973 with a bachelor's degree in Civil Engineering.

Exhibit B

5. After graduation I was hired by the James F. McClaren Company where I worked on the design of potable water distribution systems.
6. In about 1976, I worked on the design of a potable water reservoir in London, Ontario, Canada and in particular I worked on the design of a potable water reservoir cover.
7. At about the same time that I was working on potable water distribution systems, I was also working on sewage treatment systems and landfill systems for the James F. McClaren Company. Sewage treatment and anaerobic fermentation systems are often referred to as "dirty water" systems while potable water systems are referred to as "clean water" systems for drinking purposes. Landfill systems are referred to as "solid waste" systems.
8. In 1979 I left the James F. McClaren Company (then called SNC-Lavalin) and joined ADI as stated in paragraph 3.
9. Since graduation from the University of Moncton in 1973 I have had considerable experience with both "clean water" and "dirty water" systems.
10. I have read and am familiar with the final "Office Action in Reexamination," mailed February 17, 2000 ("Office Action"), in the above-referenced reexamination.
11. I have read and am familiar with the prior art cited by the Examiner in the Office Action, including United States Patent Nos. 4,503,988 to Gerber ("Gerber"); 4,438,863 to Wilson ("Wilson"); 4,139,117 to Dial ("Dial"); 3,330,118 to Biais

("Biais"); and the Schlegel Proposal to FDL Foods, Inc., Dubuque, Iowa ("Schlegel Proposal").

12. Wilson, Gerber, and the Schlegel Proposal relate to anaerobic or "dirty water" systems. Dial is directed to a potable or "clean water" system. Biais is directed to a system for storing liquid gases.
13. With respect to Wilson, Gerber and the Schlegel Proposal, it is my belief, as well as is evidenced by the Wilson, Gerber and Schlegel Proposal, that people designing anaerobic, or "dirty water," systems did not consider putting insulation on the cover of such a system at the time of inventing the invention disclosed in the '691 patent. The thought at the time was that putting insulation on the cover would interfere with collection of gas evolving from the anaerobic fermentation occurring in a dirty water system.
14. Anaerobic systems require the collection of great amounts of gas. What is more, they require that the gas be collected quickly and without interruption. If there is a blockage in the gas collection, the anaerobic cover will fill with gas and the cover may be torn loose from its mooring on the edge of the pond, thus destroying the system.
15. It is my opinion that at the time of filing of the '691 patent application, designers of "dirty water" systems would not have considered putting insulation on the cover because of fear of interruption of the collection of the generated gas.
16. It is my further opinion that people working on the development of "dirty water" systems would not look to patents or publications concerning "clean water"

systems for a solution to their problems. The problems faced by the designers of the two types of systems are completely different. Indeed, the "dirty water" and "clean water" designers had their own trade organizations and their own design manuals. Never, when in mind that I was working on potable, or "clean water" systems, did I ever refer to a manual on "dirty water" systems for a solution to a problem. Similarly, I did not utilize "clean water" manuals to assess problems found in "dirty water" design problems. The two are mutually exclusive.

17. Designers of "clean water" systems operate under guidelines from the American Water Works Association. Designers of "dirty water" systems operate under guidelines from the Water Environment Federation and Industrial Fabrics Association International ("IFAI"). Each of these organizations provide guidelines, material accreditation, and material and construction testing standards for their respective industries. Each organization develops their own experts, clients, consultants, designers and material manufacturers. People working in the "dirty water" area do not look for solutions in the "clean water" area.
18. Designers in the "clean water" area do not face the same problems as do designers in the "dirty water" area. For example, clean water, or potable water, designers are concerned with basically two problems -- evaporation and purity of the water. Thus, the covers that are utilized in "clean water" systems are solely for the purpose of covering the water storage area. There is no concern about gas generation since there is virtually no gas generated. They do not look to

solutions in the "dirty water" area since they do not face the gas generation and removal problems.

19. Biais relates to an entirely different problem. Biais is concerned with storing liquid gases such as liquid nitrogen. In addition to being a completely different type of cover than that in the '691 patent, Biais uses its insulated cover to maintain the cold temperature of the liquid gas to prevent evaporation of the liquid. In Biais, the problem addressed is preventing the formation of gas from the liquid. Indeed, if the liquid material is converted into gas, the purpose of the storage is defeated since eventually all of the stored liquid will be depleted. People involved in the design of anaerobic fermentation systems would not look to a system that was trying to prevent the generation of gas.
20. I further declare that all statements made herein of my knowledge are true and that all statements made on information and belief are believed to be true, and further, that the statements are made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

07 April 2000  
Date

Claude G. DeGare  
Claude G. DeGare